

REMARKS

The Examiner rejected claims 1-24 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,487,396 to Sassi (herein referred to as "Sassi") in view of U.S. Patent 5,999,831 to Itoh (herein referred to as "Itoh") and further in view of U.S. Patent 6,529,749 to Hayes et al. (herein referred to as "Hayes"). To issue the §103 rejection, the Examiner must show that (1) the prior art would motivate one of ordinary skill in the art to select the cited references and combine them as stated by the Examiner and (2) the references, as modified, teach each and every limitation of the claimed invention. Applicant respectfully submits that not only is there no motivation to combine Hayes and Itoh with Sassi, but that the combination does not teach the claimed invention.

There is no motivation to combine Itoh and Hayes with Sassi. Itoh discloses a portable device divided into upper and lower sections that are electrically connected by one or more resistive components. The purpose of the Itoh invention is to help protect the human body from electromagnetic waves while improving the radiation efficiency and radiation pattern of an antenna (column 1, lines 41-45). Hayes discloses a compact convertible dipole/inverted-F antenna incorporated into a mobile terminal. The purpose of the Hayes invention is to provide a compact antenna within a mobile terminal that can selectively radiate within multiple frequency bands (column 2, lines 21-31). Sassi discloses a mobile terminal with a flip portion connected to a body with a hinge mechanism. The purpose of the invention disclosed in Sassi is to introduce new control means that may be used with one or more user interfaces to enhance the usability of electronic devices (column 2, line 61 through column 3, line 15). As such, the invention disclosed in Sassi is related to user interface controls for wireless devices and clearly has no relationship to antennas for wireless devices.

It is clear from the above discussion that both Itoh and Hayes relate to antennas for wireless devices. However, Sassi is unrelated to antenna inventions, and instead is related to user interface controls. Therefore, one skilled in the art would never be motivated to select the

Sassi reference, much less combine the antennas of Itoh and Hayes with the wireless device of Sassi. Because there is no motivation for one skilled in the art to select and/or combine the cited references, the present invention cannot be obvious in view of Sassi, Itoh, and Hayes. Applicant respectfully requests reconsideration.

Even if, *arguendo*, there was motivation to combine Sassi with Itoh and Hayes, the combination does not include each and every limitation of the claimed invention, as required by §103. Each independent claim (claims 1, 13, 19, 21, and 22) recites a hinge that connects a body of a mobile terminal to a flip portion of a mobile terminal, where the hinge comprises an antenna used by an electronic circuit within the mobile terminal.¹ The Examiner contends that Itoh teaches placing an antenna at a hinge portion of the portable telephone. However, placing an antenna at a hinge portion of the portable telephone simply indicates that an antenna is near the hinge. Nothing in Itoh teaches or suggests that the hinge itself functions as the antenna. Indeed, as seen in Figure 7, the wireless device includes a separate antenna (11) and hinge. Therefore, Itoh does not teach or suggest a hinge that operates as an antenna as required by the claimed invention. Because neither Sassi nor Hayes correct the deficiency of Itoh, the claimed invention is not obvious in view of the combination of the cited references. Therefore, independent claims 1, 13, 19, 21, and 22 are patentably distinct over the cited art. Applicant respectfully requests reconsideration.

Claims 2-12, 14-18, 20, and 23-24 depend from independent claims 1, 13, 19, and 22 respectively. Because the independent claims are patentably distinct from the cited art, the dependent claims are also patentably distinct from the cited art. Applicant respectfully requests reconsideration.

¹ Claim 1 includes a hinge connecting said body to said flip portion, said hinge comprising an antenna for use by an electronic circuit positioned within said mobile terminal.

Claim 13 includes using said antenna as a hinge for a flip portion of said mobile terminal.

Claim 19 includes a hinge, said hinge forming an inverted-F antenna and hingedly securing said flip portion to said body, said hinge electrically coupled to said printed circuit board.

Claim 21 includes connecting a flip portion to a body portion of the mobile terminal using a hinge that also comprises an antenna.

Claim 22 includes a hinge comprising an auxiliary antenna connecting said flip portion to said body, said auxiliary antenna operatively connected to said electronic circuitry, said auxiliary antenna for communication at a second operating frequency

The Examiner objected to the abstract of the disclosure because the current abstract contains fewer than 50 words. The Examiner has mistakenly construed the guidance provided by MPEP §608.01(b) ("abstract should be in narrative form and generally limited to a single paragraph within the range of 50 to 150 words") as a requirement. The only length requirement per 37 C.F.R. §1.72 is that the abstract "may not exceed 150 words in length." Nothing in 37 C.F.R. §1.72 defines a minimum word requirement for the abstract. Therefore, Applicant respectfully submits that the current abstract complies with the current patent rules. Applicant requests the Examiner to reconsider the objection.

In light of the above arguments, Applicant submits that claims 1-24 stand in condition for allowance. Applicant respectfully requests the Examiner reconsider the objection and the rejections and allow the application to move forward to allowance. If any issues remain unresolved, Applicant asks that the Examiner call the undersigned agent so that any such issues may be expeditiously resolved.

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By:

Respectfully submitted,

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